

Three papules in a row

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QUESTION: A 14-year-boy is seen in the office with his mother because he noticed 3 new bumps on his abdomen (figure 1). He has no itching and is feeling well. His mother is concerned that he got this from their new cat. The cat is losing clumps of hair and scratching her skin a lot.

What is the diagnosis?

What are the treatment options?

What should be done for the cat?



Figure 1 Three bumps appeared on the abdomen of the 14-year-old patient

ANSWER: These 3 papules are molluscum contagiosum. The papules show the characteristic features of being shiny and raised with central umbilication. They also look stuck on the surface so that they can be peeled off with a fingernail. These papules measure 4 to 5 mm. The papules of molluscum contagiosum generally range from 1 to 5 mm.

Molluscum contagiosum is caused by 3 different DNA poxviruses. The infection is spread through person-to-person contact, autoinoculation, or contact with fomites (objects that can harbor pathogens, such as clothing). Molluscum contagiosum is more common in children but also occurs in young adults. In adults, it may be sexually transmitted and found in the genital area. In children, it usually is not sexually transmitted and is not by itself indicative of sexual abuse.

Molluscum contagiosum can regress spontaneously. Most parents of patients with the infection and infected adults want the lesions treated because they fear further spread of lesions to themselves and others. This family wanted the 3 papules to be removed.

Severe infections of molluscum contagiosum occur because of immunosuppression in persons infected with the human immunodeficiency virus (HIV). They can be widespread over the face or become giant lesions of 5 to 10 mm. In this patient, the lesions were not acquired by sexual contact and were unrelated to his new cat. This boy is otherwise healthy and is not HIV-positive.

TREATMENT

Accepted treatments include curettage, cryotherapy, various topical agents, and electrodesiccation.¹ Additional lesions may crop up after the visible lesions are removed. The advantage of curettage is that the result is immediately visible and close to 100% effective for the treated lesions.

Figure 2 shows the use of a curette to scrape a lesion from the skin. The curette finds the plane between the abnormal papule and the normal skin below, resulting in minimal damage and scarring. This procedure may be performed with or without anesthesia. This patient preferred not to have anesthesia because he was worried that



Figure 2 A curette is used to scrape the lesions from the skin

the administration of the anesthetic agent would be more painful than the curettage. Because either approach is acceptable, the patient should be given the choice. After curettage, hemostasis was obtained by applying aluminum chloride solution on a cotton-tip applicator.

The most effective and rapid form of anesthesia is a 1% solution of lidocaine hydrochloride with epinephrine administered with a 27- or 30-gauge needle. Injectable lidocaine works quickly, and the epinephrine helps to prevent bleeding. Topical EMLA [eutectic mixture of lidocaine and prilocaine] is slower-working and less effective. However, because the cream causes no pain on application, it is a good method to use for children. Topical EMLA cream should be applied 1 hour before the procedure. The family may be sent home with a prescription for EMLA cream to be applied before leaving home on the day of the appointment.

Cryotherapy is easy to use and works rapidly. Liquid nitrogen is applied to each lesion until the whole lesion turns white with a 1-mm halo on the surrounding normal skin. The disadvantage of this therapy is that it is often ineffective and requires multiple visits before the lesions resolve. Although electrodesiccation is an option, the risk of scarring is probably greatest with this form of therapy. Electrodesiccation may cause more tissue destruction to the dermis, making scarring more likely.

Topical agents that can be applied at home painlessly for small children include salicylic acid preparations and tretinoin. Almost all of the topical wart-removing agents that can be purchased over the counter can be used to treat molluscum contagiosum.

The newest topical agent being studied to treat this infection is imiquimod cream, an immune-response modulator. Results of a randomized controlled trial using 1% imiquimod cream showed that in the group treated with imiquimod cream, 82% of patients and 86.3% of lesions were cleared at 4 weeks.² In the group treated with placebo cream, 16% of patients and 63% of lesions were cleared at 4 weeks. Imiquimod is currently not approved by the Food and Drug Administration for the treatment of molluscum contagiosum.

OUTCOME

The patient tolerated the curettage well, and the 3 lesions healed with minimal scarring. The cat's skin condition was unrelated to the molluscum contagiosum in this boy. The family was advised that the cat should be seen by their veterinarian. Whereas the molluscipoxviruses are related to the cowpox virus, there is no "catpox" virus.

References

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